

Injury Prevention: Fact vs Fiction Series

Mouthguards Can Prevent Injuries

FACT SHEET 12-002-0915

Why wear a mouthguard?

The primary reason to wear a mouthguard is to protect your lips, cheeks, and tongue from being cut or bruised by your teeth and to prevent your teeth from being knocked out, chipped, or fractured.

Military personnel are *required* (per AR 600-63) to wear mouthguards for specific military training activities, including:

- obstacle and confidence courses
- hand-to-hand combat
- rifle/bayonet training
- pugil stick training



Photo by Ben Bunger, APHC (Prov)

Do mouthguards really prevent injuries?

Scientific evidence has shown that mouthguards prevent injuries to the lips, mouth, tongue, and teeth. These are referred to as dental and orofacial injuries. A 1999 study at Fort Leonard Wood, Missouri, showed a 74% decrease in dental injuries during military combat training activities once mouthguards were provided. Mouthguards do not prevent all kinds of head injuries. For example, they won't reduce risk of concussions.

Though mouthguards can reduce a persons' risk of certain injuries, not all mouthguards are alike. Some offer more protection than others, though other factors such as comfort and cost should be considered when deciding which to use. See the next page for additional information.

Why are mouth injuries a concern for the Army?

Due to the nature of military training activities and sports, tooth losses due to injuries are not uncommon among Army Soldiers. Tooth loss as well as other mouth injuries often result in pain, lost time from work for treatment, and facial disfigurement.



Photo by Ben Bunger, APHC (Prov)

When should you wear a mouthguard?

In addition to the military training activities for which they are required, mouthguards are highly recommended for activities that have the potential to seriously harm the face or mouth from:

- head-to-head contact
- falls
- · teeth clenching
- · blows to the mouth

The American Dental Association and the International Academy of Sports Dentistry identified 29 sports/exercise activities during which mouthguards should be worn. Hazardous popular sports among military members include: football, basketball, martial arts, wrestling, soccer, skiing, extreme sports, volleyball, racquetball, softball, skateboarding, lacrosse, rugby, and equestrian events. These activities, as well as Army training such as combatives, pose a notable risk of orofacial and dental injury.

How well do different types of mouthguards prevent injuries?

There are three types of mouthguards commonly used in sports and recreational activities. They vary in comfort, fit, protection, and cost. Consider investing in a mouthguard that is not only comfortable but also offers good protection.

Туре	Description	Level of Protection	Comfort and Fit	Cost
Custom- made	 Impression of individual's mouth is taken by a dentist 	 Offers the best level of protection Made from high quality materials to ensure fit and stay in place 	 Provides highest level of comfort and fit of the three types of mouthguards 	 Expensive Obtained through dentist's office
Boil and bite	 Wearer softens mouthguard in hot water and inserts into mouth after cooling Tray is molded and shaped to wearer's bite using fingers, lips, and tongue 	 Not as good as custom, but more protection than the stock "ready to wear" types May lose thickness and cushioning throughout use 	 May inhibit speaking when worn May not stay in place in mouth 	Inexpensive Widely available in sporting goods stores
Stock, "ready-to- wear"	 Use 'as bought' with no preparation Must be held into place by clenching teeth during use 	 Offers least protection of the three types of mouthguards Mouth must be closed to provide protection (falls out if mouth is open) 	 May inhibit breathing or speaking when worn Limited adaptability Sizes are limited (typically small to large) 	 Inexpensive Widely available in sporting goods stores

Tips for Mouthguard Care

- RINSE with cold water or mouthwash before and after use. You can also clean it with a toothbrush and toothpaste.
- CLEAN in cool, soapy water and rinse thoroughly once a week.
- STORE in a durable, perforated container to prevent damage and allow air flow. Keep mouthguard away from direct sunlight and hot environments.
- INSPECT and REPLACE if there are holes/tears, bite-throughs, or distortions. Mouthguards
 wear out and do not provide the same level of protection once damaged.

Information sources:

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